
Environmental attitudes and household consumption: an ambiguous relationship

Erling Holden*

Sogn and Fjordane University College,
P.O. Box 133, 6851 Sogndal, Norway

E-mail: erling.holden@hisf.no

*Corresponding author

Kristin Linnerud

Cicero Centre for International Climate and Environmental Research,
P.O. Box 1129, Blindern, 0318 Oslo, Norway

E-mail: kristin.linnerud@cicero.uio.no

Abstract: This article analyses the relationship between environmental attitudes and energy use in the home and for transport by Norwegian households. Quantitative surveys were used to find statistical correlations, and qualitative analyses to reveal mechanisms that influence the ability to behave in an environmentally friendly way. Three theses about attitudes, mechanisms and household consumption are presented. Firstly, a desire to project an environmentally friendly image has little influence on energy use in the home and for transport. Secondly, a sense of powerlessness prevents people from translating positive environmental attitudes into low energy use in the home and for everyday transport. Thirdly, a desire to self-indulge prevents people from translating positive environmental attitudes into low energy use for long distance leisure travel. These results have important implications for environmental policy. Public information and awareness campaigns can give consumers information on how to behave in an environmentally responsible way, but tend only to influence categories of consumption with little environmental impact. Structural change can be used to mitigate the effect of the sense of powerlessness and encourage environmentally friendly behaviour, but the desire to self-indulge is much more difficult to deal with.

Keywords: attitudes; green households; consumption; mechanisms; energy and transport.

Reference to this paper should be made as follows: Holden, E. and Linnerud, K. (2010) 'Environmental attitudes and household consumption: an ambiguous relationship', *Int. J. Sustainable Development*, Vol. 13, No. 3, pp.217–231.

Biographical notes: Erling Holden is the Head of Research at the Sogn and Fjordane University College. He holds a Master's degree (1988) in Mechanical Engineering from the Department of Energy and Process Engineering, Norwegian University of Science and Technology (NTNU). In 2002, he received his Doctoral degree in Urban Planning from the Department of Urban Design and Planning, NTNU. He studied sociology and social psychology at the Program for Research and Documentation for a Sustainable Society (ProSus), University of Oslo from 2001 to 2004. From 2005 to 2006, he was a Visiting Scholar at the Oxford Institute for Sustainable Development, Oxford Brookes University.

Kristin Linnerud is an Energy Economist and a Senior Researcher at the Centre for International Climate and Environmental Research (CICERO), Oslo, Norway, where she is leading a major research project on climate change and the power sector. She has varied work experience, including membership in the board of directors in the industry and energy sector. She holds a PhD in Economics from the Norwegian School of Economics and Business Administration and an MSc in Finance from the London School of Economics.

1 Prologue

Toril¹ is 37 years old, married with two children, and lives in a small town in Norway. She has been interested in environmental issues for many years and has learnt a great deal about the causes of environmental problems such as global warming, depletion of the ozone layer and loss of biodiversity, and how they could be solved. This interest dates from her early teenage years. At the age of 15, she was already an active member of the local branches of two of Norway's largest environmental organisations. And what began as a hobby has become her livelihood; Toril now works on environmental issues in one of the largest firms in her community.

Toril does everything an environmental activist is supposed to do: her family sorts the rubbish and has a compost heap in the garden, they make jam and fruit juice every autumn and bake bread every week, and of course the children are members of the local eco-detectives group. All small steps towards a greener society, inspired by ideological conviction. It sounds as if everything is as it should be. But is it really?

It turns out that Toril and her family use as much energy in their home as people who show little or no interest in environmental issues – in fact, slightly more. They drive their car just as far every week as people who never consider the effect on the environment. Even more disturbing is the fact that Toril's family is rather too fond of flying to their holiday destinations. In fact, they fly a good deal more than people in the same community who do not share their interest in the environment. It is no surprise that even environmentally aware people have to heat their homes and drive their cars. It is disappointing that they do not use less energy for these purposes, though not really unexpected. But private air travel is another matter – this is a matter of choice. We all meet many constraints in our everyday lives, but surely an environmentally aware person could avoid a mode of transport with such a high impact on the environment when going on holiday?

2 Scope and research questions

This article deals with people's attitudes and behaviour. We intend to show that there is a plausible explanation for the lack of consistency between Toril's positive environmental attitudes and her actual level of consumption. It may be useful to start with a discussion of the concept of 'attitude'.

Seventy years ago, Allport (1935, p.798) stated that

“[...] the concept of attitude is probably the most distinctive and indispensable concept in contemporary American social psychology. No other term appears more frequently in the experimental and theoretical literature.”

Since then, however, interest in attitude and the importance assigned to the concept in studies of human behaviour has fluctuated (McGuire, 1985). Nevertheless, studies of people's attitudes and attitude-behaviour relationships are considered to be important and useful in sociology and psychology today (Pieters, 1988; McGuire, 1986). The problem can be to define exactly what an attitude is. Fishbein and Ajzen (1972) found more than 500 different definitions and ways of conceptualising attitudes.

We would like to mention two important points relating to the way in which the word 'attitude' is used in this article. Firstly, an attitude is used to mean a positive or negative *feeling* about a specific action (Pieters, 1988). Secondly, attitudes are assumed to be one of several factors that *explain* (and can perhaps be used to predict) human behaviour (Fishbein and Ajzen, 1972). This is a simplified description and way of using the concept of attitude. However, in our opinion, it is sufficient in this context.

The starting point for our article is behaviour related to private consumption, particularly energy use in the home and for everyday transport and leisure travel (not including official travel). Consumption other than energy use in the home and for travel is referred to here as 'other consumption'. We have chosen to focus on energy use in the home and for transport because it has become apparent in recent decades that these categories of private consumption have serious environmental impacts (Holden, 2001; Hille, 1995).

The overall goal of this article is to learn more about the relationships between environmental attitudes and the level of private consumption in Norwegian households. A number of studies have shown that it can be difficult to find direct and unambiguous empirical relationships (Pieters 1988; Thøgersen, 1999; Ajzen, 1996; Greenwald, 1989; McGuire, 1989; Fazio 1989; Ronis et al., 1989). But it is too easy to conclude from this that attitudes have no influence at all on consumption. A number of studies show that in some limited areas, positive environmental attitudes do in fact result in green behaviour (Thøgersen, 1999; Lavik, 1997), and Toril's story provides another example of this.

The questions that are discussed in this article are as follows:

- In which consumption categories do we find that positive environmental attitudes are to a large degree translated into environmentally friendly behaviour?
- In which consumption categories do we find that positive environmental attitudes are only to a limited degree translated into environmentally friendly behaviour?
- Which mechanisms can be used to explain the relationship or lack of relationship between attitudes and behaviour?
- What implications do the answers to the above questions have for environmental policy development?

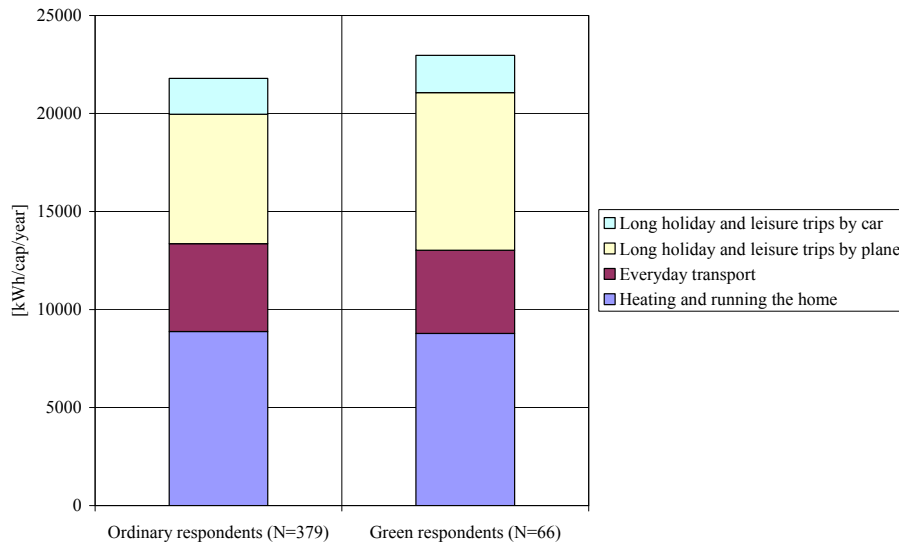
We will discuss these questions and base our explanations and discussion on extensive empirical material from 1,900 households in Oslo (including surrounding suburban areas), Stavanger and Førde, a small town in Western Norway (Holden, 2001; Holden, 2004a; Holden, 2004b; Holden and Norland, 2004). The empirical material includes three quantitative questionnaire-based surveys and some qualitative case studies. While all the households answered the questionnaires, the case studies are based on in-depth interviews

of a smaller sample of households. This provides both an overview of the situation and a deeper insight, and makes it possible to switch between the two perspectives.

3 The quantitative surveys: Toril is not alone

We will start by discussing the results of one of the quantitative studies (Holden and Norland, 2004) in more detail. Analyses of ‘green’ and ‘ordinary’ respondents² in eight residential areas in Oslo show that Toril is by no means the only person who combines a high level of environmental awareness with high energy use in the home, a large volume of everyday transport and a large number of long flights to holiday destinations (Figure 1).

Figure 1 Annual per capita energy use for private consumption (i.e., energy use to heat and run homes and for transport purposes) by (1) green and (2) ordinary respondents (see online version for colours)



Notes: Figures are given as kWh/person/year (N = 445; F = 0.329; p = 0.567).

(1) Green respondents are members of a Norwegian environmental network (Norwegian Environmental Home Guard).

(2) Ordinary respondents are not members of the network.

The data from the surveys show that green respondents use more energy per year for private consumption than ordinary respondents, but the difference is not statistically significant. If we look at each of the categories of energy use separately, we find that there are only small differences between the two respondent groups as regards to energy use in the home, for everyday transport and for leisure travel by car. The real difference between the two groups is in leisure travel by plane. The green respondents travel considerably further every year than the ordinary respondents and are also more likely to make long journeys to destinations outside Europe, thus reinforcing the impression that their behaviour is not very environmentally friendly in this respect.

It is of course possible that the apparent correlation between environmental awareness and the volume of leisure air travel is a spurious result and that other factors than environmental attitudes are the real cause of the pattern revealed here. If, for example, the green respondents earn more and are more highly educated, these factors rather than environmental attitudes could explain the volume of air travel. Multivariate regression analyses were therefore carried out to isolate the effects of specific variables such as sex, age, income, education and place of residence (Holden and Norland, 2004). Surprisingly, even when the results were adjusted for these factors, the volume of air travel was still higher for the green respondents. In other words, if we compare two respondents of the same age, sex, level of education, income and place of residence, energy used on leisure air travel will be higher for the green respondent. Thus, there is a statistically significant correlation between being a green respondent and high energy use on leisure air travel. In contrast, there is no significant correlation between being a green respondent and energy use in the home for everyday transport or for leisure travel by car.

Nevertheless, the main conclusion from this analysis is that there is no correlation between positive environmental attitudes (as shown by the green respondents) and the level of energy use. The green respondents do not behave in a more environmentally friendly way than other people, and this is confirmed by the other two quantitative studies in this material (Holden, 2004a; Holden, 2004b). However, this does not explain the reason why there is no correlation. The statistical analyses do not provide an understanding of or explanation for the underlying mechanisms that lead to this pattern – or rather lack of pattern. Why do the green respondents travel by plane more than other people? Why are they apparently unable to do much to limit their everyday energy use for transport and in the home? At the risk of anticipating the qualitative interviews, it should be mentioned here that the green respondents seem to have some success in achieving an environmentally friendly level of consumption in some other areas, but find it much more difficult to reduce the volume of transport they use and to limit energy use in the home. To understand this and find credible explanations, it is necessary to turn from the questionnaires and talk to people directly.

We will therefore turn our attention to a series of in-depth interviews conducted in 1999 with households in Førde and Oslo (Holden, 2001). The objective was to find explanations by gaining an understanding of what was happening in individual households. Thus, our intention was not merely to confirm the gaps between environmental attitudes and behaviour found in the surveys, nor was it our intention to behave in a moralistic and reductionist way during the interviews. We simply wanted to understand why such gaps occur by revealing explanatory mechanisms.

The interviews were conducted as semi-structured group interviews in the households, in which the number of household members varied between one and six (and included three generations). We began each interview using an interview guide containing five main topics: energy use in the house, refurbishment, everyday travel, leisure-time travel and environmental issues. The semi-structured nature of the interviews led to an interweaving of the topics and a switching back and forth between them. This resulted in a holistic picture of the lifestyle of the household rather than a topic-by-topic discussion.

4 On the track of mechanisms and the conditions that trigger them

According to the Norwegian sociologist Willy Martinussen (1999), it has become more and more common to define a sociological explanation as a description of the *mechanisms* that result in particular events or create and maintain a social pattern. In this article, we consider the actions that make up household consumption as a *process* – a complex process that takes place in the form of negotiations between the members of the household within the framework of their everyday lives. This process includes several mechanisms which we shall try to identify here.

In his book *Nuts and Bolts for the Social Sciences*, Elster (1989) discusses the concept of mechanisms in more detail and uses it as a key to explaining complex social phenomena. To explain an event (e_2), which may be either a physical or a mental action, it is necessary to explain why it took place. This is generally done by finding an earlier event (e_1) which caused the event that is to be explained, and a causal mechanism (m) which links the two events together. Thus, it is not sufficient to find a statistical correlation between two events such as a positive environmental attitude and a lack of environmentally friendly behaviour. A statistical correlation is not an explanation, regardless of how many control variables are included in the analysis. There must also be a mechanism linking the two events.

Elster gives an example of this. A person has changed his mind about a job which he previously considered very attractive (e_1) but in which he has now lost interest (e_2). The explanation for this consists of two elements. Firstly, before changing his opinion, the person learned that he was not in the running for the job. The second element of the explanation requires identification of the mechanism that caused the person to change his mind. In this case, it is a mechanism called *cognitive dissonance*, which persuades us to give up ambitions that appear to be impossible to achieve. In the case we are discussing here, it is necessary to find mechanisms that link positive environmental attitudes (e_1) and consumption behaviour (e_2).

Moreover, Elster points out that several mechanisms exist at the same time in each of us, and that it is impossible to know in advance when a particular mechanism will operate.

“As far as I know, we have no theories that tell us when one or the other of these mechanisms will operate. When one of them does operate, we recognize it immediately, and so we can explain the behaviour it generates. But we cannot reliably predict when it will operate.” [Elster, (1989), p.9]

This is also a crucial point, according to Sayer (1992) in *Method in Social Science* (1992). Like Elster, Sayer states that finding an explanation does not mean finding statistical correlations between two events, but rather describing the mechanisms that link them. He agrees that it is not possible to say when a particular mechanism will be activated. It is the specific conditions that determine whether this will happen.

“Whether a causal power or liability [Sayer uses the three terms “causal power”, “liability” and “mechanism” as synonyms] is actually activated or suffered on any occasion depends on conditions whose presence and configuration are contingent.” [Sayer, (1992), p.107]

Thus, it is of crucial importance to identify both the relevant mechanisms and the conditions that activate each of them when attempting to explain the complex and somewhat unclear relationship between positive environmental attitudes (which in

principle involves an intention to act in an environmentally friendly way) and actual consumption.

In our efforts to reveal the mechanisms and the conditions under which they operate, we have taken inspiration from grounded theory. This method was originally developed by the two sociologists Barney Glaser and Anselm Strauss (1967) and is generally very influential in qualitative research. Explained briefly, the method involves approaching the observations, i.e., the empirical material, with as few preconceived ideas as possible, using concepts to categorise the data and, finally, finding relationships between the categories and the concepts. In this study, categories and concepts need to be linked to mechanisms and conditions respectively. In the final analysis, the aim of grounded theory is to develop a theory about a phenomenon. However, it is not necessary to set high ambitions; the method is also useful for systematising and analysing a large body of written material. We realise, of course, that it is almost impossible to look at data without any preconceived ideas. We all carry our own 'baggage' of ideas around with us, as the Danish writer Carsten Jensen (1988) puts it. Nevertheless, we have tried to travel as lightly as possible when carrying out our analyses. Our analyses provide support for the claim that there are at least three mechanisms that influence whether households are able to behave in an environmentally friendly way: a desire to project an environmentally friendly image, a sense of powerlessness, and a desire to self-indulge (Holden, 2001; Holden, 2007).

4.1 An environmentally friendly image: 'Who do I want to be?'

In the modern world, it is often argued that people are no longer searching for their identity but are instead deciding who they want to be. This is often connected with the general trend towards individualisation that is sweeping across the whole (western) world. Individualisation and opportunities for people to shape their own lives are often linked to the lifestyle concept (attitudes are an important element of a lifestyle, which is why lifestyle is relevant to the questions discussed in this article). Several authors consider lifestyle forms to be a more important basis for who we want to be and our consumption patterns than the more frequently invoked concepts of tradition, social class and Bourdieu's 'habitus'. The Danish sociologist Bente Halkier (1999) writes that 'lifestyle', more than any other concept, has replaced more traditional sociological concepts. Similarly, the Norwegian social anthropologist Marianne Gullestad (1989) states that individual lifestyle choices have become more important than merely following the traditions and cultural rules of society.

But what do our informants have to say about this? Do they choose who they want to be? Are they aware of what kind of lifestyle they have, and is this a deliberate choice? And not least, are lifestyle and attitude important for their consumption behaviour in practice? At this point in the discussion we would just like to say that the answer to these questions is yes. There *is* a mechanism at work in our informants which can trigger environmentally friendly behaviour and which has an influence on certain aspects of their consumption behaviour. However, as we shall see, other mechanisms are at work too.

4.2 A sense of powerlessness: 'It won't work anyway'

Many of our informants defended their non-environmental behaviour by saying that they had no choice. Circumstances made certain types of behaviour almost inevitable. A large

proportion of the respondents expressed a sense of powerlessness. We were frequently given explanations such as: “We haven’t given it (i.e., travel in an environmentally friendly way) much thought, since it won’t work anyway”, “there’s no other way (than using the car)”, and: “I haven’t considered it (i.e., cycling), since it hardly matters what I do anyway”.

Thus, they felt that they could not behave in the way that they ought to, as environmentally responsible people. There may be various underlying reasons for a sense of powerlessness, and these may be complex. However, there were two areas where the sense of powerlessness was particularly strong. The first and easiest to identify was *transport*, and particularly transport by car. And this does not only mean travel to work. The sense of powerlessness is just as strong when it comes to short, everyday leisure trips. The other area is more difficult to define and is ascribed to the *consumer society* as such.

The first example of powerlessness can be related to the concept used by the Norwegian sociologist Dag Østerberg (1990), which could be expressed as powerlessness transmitted by people’s material environment. Østerberg points out that all human activity – which he calls a ‘project’ – takes place in an environment. This environment – which he calls the ‘situation’ – limits what it is likely to do. Østerberg generally uses the environment, or situation, to mean physical structures (although a person’s abilities, preferences and skills also set limits on what the person can do). The physical surroundings are the framework for all human ‘projects’. Gullestad (1989) stresses the idea of ‘everyday powerlessness’, meaning situations where there is a collision between social structures, including physical structures, and people’s everyday lives.

The second form of powerlessness can be related to sociologist Zygmunt Bauman’s (2000) description of the *consumer society*. The consumer society needs to engage its members as consumers. Consumption, understood as playing a role as a good consumer, is the norm. Bauman claims that the way in which today’s society shapes its members is primarily dictated by their duty to play their role as consumers.

Østerberg, Gullestad and Bauman all use the concept of powerlessness to describe more than just a feeling of being forced into driving a car or consuming other goods. There are underlying mechanisms or social processes that trigger the feeling of being trapped in a particular pattern of behaviour.

4.3 *A desire to self-indulge: ‘I’m not a fanatic, after all’*

Finally, everyone has a domain where they do not submit to their own convictions and attitudes. Nor do they feel powerless in this field. They do not feel that they have to do something (in order to project a particular image) or that they have no other choice (a sense of powerlessness), but there is something they *want to do*.

The green respondents are not at all proud of this type of consumption. There is no question of projecting an image; rather the reverse. They do not wish to be identified with this type of consumption, and would prefer it to remain a well-kept secret. Every time this kind of consumption was mentioned in interviews, the ‘confessions’ were followed by slightly embarrassed laughter. People often used phrases such as: “A little bit of pleasure”, “A bit of luxury now and then”, and “It’s something I really wanted to do”. They were not projecting an image or feeling a sense of powerlessness; they were deliberately taking more than what they felt was their due.

Is this a form of hedonism? Is it a necessary counterweight to the strict norms involved in projecting a green image and to the depressing sense of powerlessness? In *The Unmanageable Consumer*, Gabriel and Lang (1995) present the hedonist as one aspect of the modern consumer. A hedonist continually seeks pleasure. Gabriel and Lang refer to Campbell (1987), who distinguished between traditional and modern hedonism:

“Traditional hedonism is a hedonism of a multitude of pleasures, a hedonism of sensations attached to the senses – taste, smell, touch, sight and hearing. Modern hedonism, on the other hand, seeks pleasure not in sensation but in the emotion accompanying all kinds of experiences.” (Gabriel and Lang, 1995)

This gives a basis for discussing two main categories of hedonism, or unrestrained consumption. The first category includes food, clothes and, not least, luxurious goods for the home. The second category is holiday travel. Our respondents were perfectly aware of how ‘politically incorrect’ it was to engage in unnecessary refurbishment, heat the house through the night, drive their cars to work, fly to the tropics or drive all the way through Germany. Thus, they exemplified both the traditional and the modern forms of hedonism.

5 Hero, victim and villain: three theses on green attitudes and behaviour

It appears that all three of the mechanisms described above are to some extent hard-wired into all of us. A person is not a ‘hero’ (projecting an environmentally friendly image) or a ‘victim’ (with a sense of powerlessness) or a ‘villain’ (self-indulgent). On the contrary; the same person plays all three roles. All three mechanisms are at work in all of us, but in different areas. In our view, this is a very important point, and is highly pertinent to the question of how far we can hope to influence consumers. It appears that, on the whole, the three mechanisms operate in different areas of private consumption. They have an effect on decisions concerning environmentally friendly behaviour relating to different categories of consumption.

Everyday transport and energy use in the home represents a form of ‘invisible consumption’. The dominant mechanism is the sense of powerlessness. People have to run their homes and get to and from work, the shops and various regular leisure activities. We have deliberately linked everyday leisure activities to this mechanism because we are not as free as we might think during our everyday leisure activities. Thus, as suggested by Christensen et al. (2007), improvements of everyday travel patterns towards more environmentally friendly patterns happen without much consideration for the environment.

In contrast to invisible consumption, the category ‘other consumption’ is visible to a larger extent. In fact, in many cases it is supposed to be visible. It is used to project a person’s image as a green consumer. This category has to do with what kind of clothes people use, what kind of food they eat, and so on.³

The third mechanism has most influence on longer-distance leisure travel. Many respondents indicated that in some situations they have a desire to indulge themselves, to free themselves from the constraints involved in environmentally friendly behaviour. An alternative or supplementary explanation for the high level of travel activity among the

green respondents could be as follows. People with a high level of environmental awareness are also concerned about global environmental issues, because environmental and development problems are increasingly global in character and are linked to conditions in developing countries. Environmental publications frequently include articles on problems and conflicts in distant parts of the world. People who are aware of these issues may well wish to see and experience such places for themselves. Moreover, some people probably like to travel to project an image of being cosmopolitan, of being well informed about the world, or simply having adventurous and sometimes demanding experiences. However, we cannot claim to have found any evidence for this explanation on the basis of the interviews.

Thus, our analyses suggest that the sense of powerlessness is linked to running a home and the everyday use of transport, while the desire to self-indulge dominates during leisure time, and “other consumption” can be used to project an environmentally friendly image. Our analysis of the interviews indicates that these are the *typical* relationships. This is not an average result based on statistical calculations, but rather a (theoretical) system which we have constructed, a consumer system in which attitudes, mechanisms and consumption categories are linked together. The mechanisms in this system are abstractions, and each of them represents one aspect of the consumer.

Our studies give a basis for constructing the following three theses that form central elements of the system (Holden, 2007):⁴

- The sense of powerlessness means that positive attitudes to conservation and environmental issues are not to any great extent translated into low energy use in the home or for everyday transport.
- The desire to self-indulge means that positive attitudes to conservation and environmental issues are not to any great extent translated into low energy use for long-distance leisure travel.
- The desire to project an environmentally friendly image does not have much influence in areas such as energy use in the home, everyday transport and leisure travel. It does appear to help in translating positive environmental attitudes into environmentally friendly consumption in some other areas, but these have little or no impact on the environment.

The empirical basis for these theses is derived from both the quantitative and the qualitative studies. In the quantitative analyses, we found no negative correlations between people’s attitudes and their behaviour relating to energy use in the home, everyday transport and leisure-time travel. We believe that two of the three mechanisms we have identified through the qualitative interview-based studies provide a likely explanation for this: a sense of powerlessness and a desire to self-indulge.

The qualitative studies suggest that in areas of consumption other than energy use in the home and everyday transport there is a link between attitudes and behaviour, and that this is provided by a third mechanism, the desire to project an environmentally friendly image. However, there has been no opportunity to supplement the empirical material with quantitative data on ‘other consumption’ and analyses that could be used to confirm this link.

6 The depoliticisation of environmental policy

What implications do these findings on mechanisms, attitudes and categories of consumption have for environmental policy in practice? What needs to be done to ensure that it is possible to achieve political goals such as reducing energy use in the home and reducing pollution from transport? Should we rely on green consumers to lead the way, or should the authorities make structural changes to facilitate change? Or are both approaches needed? And if so, how much of the responsibility for solving environmental problems should be taken by individuals, and how much by society as a whole?

Straume (2002) claims that the authorities have abdicated responsibility for environmental policy and turned it over to individual citizens. Thus, individual people are made to feel guilty while the economic system is protected against criticism. According to Straume, the authorities' focus on individual responsibility is based on the idea that environmental problems are primarily a result of people's *attitudes*, or rather a lack of positive environmental attitudes. Thus, the problem can be traced back to people's awareness, or lack of awareness, which results in behaviour with a negative environmental impact. Awareness-raising and a change in attitudes must come first before any results can be achieved outside the individual. And the way to achieve greener consumption in particular and a greener society in general is to inform and educate consumers.

This also seems to coincide closely with the path towards the greener and more equitable society that was presented by Erik Dammann when he established the movement The Future in Our Hands (*Fremtiden i Våre Hender*) in Norway in 1974.⁵ One of his most important messages was that each of us had an individual responsibility, and this was something he constantly emphasised in speeches and lectures (FIVH, 1974). He would start by urging people to shake off the yoke of the new consumer society that was emerging. He was insistent that people should understand that the new and humane path of development he was advocating would never be more than a distant dream unless every one of us was prepared to alter course, turn away from the artificial status of growth, luxury and materialism and reassess our personal values. We must refuse to allow ourselves to be manipulated by the system, he said, and refuse to accept that we are like sheep whose behaviour would always be dictated from outside.

Dammann concluded his speeches by hammering home the message that we must adopt a new lifestyle and that there would be no fundamental change in society until we ourselves changed fundamentally. He called for personal action and personal change, which he said were far too often left out of the equation but which had to form the basis of a fundamental reorganisation of society, and often reiterated that our first goal had to be to find a new lifestyle based on new and more genuine happiness.

Twenty five years later, Dammann has adjusted his course, and one of the reasons is probably the unintended depoliticising effect of focusing exclusively on individual responsibility (Straume, 2002). When *Fremtiden i Våre Hender* celebrated its first 25 years, Dammann had a different message to give. He said that there was one important respect in which his opinion had changed since 1974: he had found that it was too simple to say that our lifestyles and our consumption shaped society, the economy and politics; the opposite was equally as true (FIVH, 1999). In March 1998, a new organisation called Forum for System Criticism (*Forum for Systemdebatt*) was established in Norway. Its purpose is to look critically at the impacts of the economic system currently prevailing in Norway and other industrialised countries. Dammann's new insight naturally gave him a

central role in the establishment of the organisation. It is interesting to note that the word 'lifestyle' is mentioned neither in the appeal for support nor in the organisation's statutes.

Our results in this article must be perceived as a serious setback by people who hope that individual attempts to put an environmentally friendly lifestyle into practice will be crowned with success. Nothing in our qualitative or quantitative studies suggests that environmentally-aware consumers are able to translate their understanding into green consumption. On the contrary, they are either *unable* to do so (in areas such as energy use in the home and everyday transport) or they *excuse* themselves from doing so (during holidays and leisure activities). When we consider that these categories of consumption have particularly serious impacts on the environment, it becomes clear that there is little prospect of individual green consumers making a significant contribution. There are only limited areas where green consumers are able to achieve their ambition of leading a greener lifestyle. Unfortunately, these are not areas that really matter.

The conclusion is therefore that the authorities must play their part by making it possible for individual people to help in achieving the environmental goals of the community. And to do this, they must consider carefully the mechanisms that hinder green behaviour by consumers: a sense of powerlessness and a desire to self-indulge.

The sense of powerlessness can only be relieved through structural change. This means that if we want to reduce the environmental problems associated with everyday transport, we must turn our attention to the planning authorities and look more closely at how we design our towns and urban areas. This includes elements such as the design and location of residential areas, various services and workplaces. Much the same applies to energy use in the home; the amount of energy needed for heating and running a home is primarily determined by the type of building, its age and, in particular, its size. In our opinion, information campaigns to increase people's environmental awareness will have very little effect on the volume of everyday transport or the level of energy use in the home. As we mentioned earlier, this is also confirmed by the results of the quantitative household surveys, where a high score for environmental awareness or membership of environmental organisations had no independent effect on energy use. This is not really surprising, since people have to heat their homes, take showers, deliver their children to day care centres and travel to work regardless of their level of environmental awareness.

However, the picture is different for what we have called 'other consumption'. Here there is far more opportunity to influence people's attitudes and encourage a number of environmentally friendly solutions. Norway's National Institute for Consumer Research has carried out several major surveys and found clear links between the level of environmental awareness and behaviour such as sorting waste for recovery, taking environmental considerations into account when shopping, and choosing ecological food products (Lavik, 1997). Structural conditions do play a role here too, of course – you can only deliver bottles and paper if a collection system exists, and you can only buy environmentally friendly products if they are there on the shelves. Our point is that people who are environmentally aware appear to live up to their ideals in these areas, whereas they find it very difficult to do anything about what we have called 'invisible consumption'.

Leisure travel is different again. Neither a sense of powerlessness to change the system nor environmental awareness seems to have much effect here. This is where people indulge themselves – they take time off from work and the sense of

powerlessness, and allow themselves a time-out from their self-imposed environmental attitudes. And just like anyone else who has been working hard, green consumers look forward with great pleasure to a particularly luxurious holiday. They try hard to behave in an environmentally friendly way in their day-to-day lives, with only a limited amount of success, and feel a need for holidays with time out from their environmental image. They indulge themselves on holiday, increasingly more often by flying to exotic destinations – with detrimental effects on the environment.

It is difficult to suggest ways of persuading people to adopt more environmentally friendly holiday habits. Information campaigns are unlikely to be successful. Not because people are unable to follow the advice, but because they do not want to. Nor is it easy to see how environmentally friendly travel could be encouraged through physical planning, as can be done to a considerable extent in the case of everyday transport. The only options left are to use economic instruments or to ignore the environmental problems caused by our leisure activities. The first of these would probably be very unpopular (“Are they going to interfere with our holidays as well now?”) and the second would be irresponsible in environmental terms. Indeed, leisure travel and its environmental impacts is a very complicated problem to deal with.

7 Epilogue

So what should we do about Toril? How can we deal with her energy-intensive everyday and leisure activities? We have suggested some of the answers above: first and foremost that we must not expect individuals to take sole responsibility for trying to create a more sustainable society. But does this mean that Toril’s commitment to environmental ideals is meaningless? We do not think so. It is true that Toril and other green consumers find it difficult to translate their own ambitions into environmentally friendly behaviour, but Toril gives her full support to the structural changes that are needed. This makes her environmental convictions an important factor in long-term efforts by the authorities to develop more sustainable economic, political and social structures. If the population has generally positive environmental attitudes, this lends legitimacy to structural changes such as strategies for the densification of housing developments, the introduction of a petrol tax or restrictions on the number of air routes. To sum up, positive environmental attitudes have a weak *direct* effect on consumption but important *indirect* effects through people’s willingness to accept structural changes.

We would like to conclude with some advice to Toril on what she could do about the vexed question of leisure travel. There are three things she could do which would probably not change her life dramatically but which would markedly reduce the environmental impact of her long-distance leisure travel. One is to avoid holidays that involve a lot of travelling from place to place. The second is to stay longer at each destination. This should reduce the volume of travel a good deal – and a welcome side effect would be that the family would not have to pack and unpack the car so often. Finally, Toril could consider reducing the frequency of her trips to exotic destinations from every year to every other year or every three years: three relatively small but significant steps toward sustainability. Or should Toril be left in peace to enjoy her holidays as she likes? What is more important: her desire to indulge herself or the environmental impact of her activities?

Acknowledgements

This article is one result of the project on Housing as a Basis for Sustainable Consumption, which received funding from the sustainable production and consumption programme run by the Research Council of Norway. The project was a joint effort by the Western Norway Research Institute and the Norwegian Institute for Urban and Regional Research (NIBR). Thanks to John Melås, who performed in most of the interviews in Førde, and Ragnhild Skogheim at NIBR who performed in the interviews in Oslo. Part of the work on this note reflects research undertaken within the Mistra Climate Policy Research Program (Clipore).

References

- Ajzen, I. (1996) 'The directive influence of attitudes on behavior', in Gollwitzer, P.M. and Bargh, J.A. (Eds.): *The Psychology of Action*, Guilford Press, New York.
- Allport, G.W. (1935) 'Attitudes', in Murchinson, C. (Ed.): *Handbook of Social Psychology*, Clark University Press, Worcester MA.
- Bauman, Z. (2000) *Globalisation*, Columbia University Press.
- Campbell, C. (1987) *The Romantic Ethic and the Spirit of Modern Consumption*, Macmillan, Oxford.
- Christensen, T.H., Godskesen, M., Røpke, I., Gram-Hanssen, K. and Quitzau, M-B. (2007) 'Greening the Danes? Experience with consumption and environment policies', *Journal of Consumer Policy*, Vol. 30, pp.91–116.
- Elster, J. (1989) *Nuts and Bolts for the Social Sciences*, Cambridge University Press.
- Fazio, R.H. (1989) 'On the power and functionality of attitudes: the role of attitude accessibility', in Pratkanis, A.R., Breckler, S.J. and Greenwald, A.G. (Eds.): *Attitude Structure and Function*, Lawrence Erlbaum Associates, New Jersey.
- Fishbein, M. and Ajzen, I. (1972) 'Attitudes and opinions', *Annual Review of Psychology*, Vol. 23, pp.487–544.
- FIVH (1974) *Ny livsstil. Om folkeaksjonen Fremtiden i våre hender, Med rapport fra åpningsmøtet*, Gyldendal Norsk Forlag, Oslo.
- FIVH (1999) *Folkevevt*, No.3.
- Gabriel, Y. and Lang, T. (1995) *The Unmanageable Consumer*, SAGE Publications.
- Glaser, B. and Strauss, A. (1967) *Discovery of grounded theory*, Aldine, Chicago.
- Greenwald, A.G. (1989) 'Why are attitudes important?', in Pratkanis, A.R., Breckler, S.J. and Greenwald, A.G. (Eds.): *Attitude Structure and Function*, Lawrence Erlbaum Associates, New Jersey.
- Gullestad, M. (1989) *Kultur og hverdagsliv*, Universitetsforlaget, Oslo.
- Halkier, B. (1999) *Miljø – til daglig bruk?* Forlaget Sociologi, Fredrikstad.
- Hille, J. (1995) *Sustainable Norway*, Project for an Alternative Future, Oslo.
- Holden, E. (2001) 'Boligen som grunnlag for bærekraftig forbruk', PhD thesis (2001:115), Norwegian University of Science and Technology, Department of Urban Design and Planning.
- Holden, E. (2004a) 'Ecological footprints and sustainable urban form', *Journal of Housing and the Built Environment*, Vol. 19, No. 1, pp.91–109.
- Holden, E. (2004b) 'Towards sustainable consumption: do green households have smaller ecological footprints?', *International Journal on Sustainable Development*, Vol. 7, No.1, pp.44–58.
- Holden, E. (2007) *Achieving Sustainable Mobility*. Aldershot: Ashgate.

- Holden, E. and Norland, I. (2004) *SusHomes – En undersøkelse av husholdningers forbruk av energi til bolig og transport i Stor-Oslo*, Rapport nr. 3/04, Program for forskning og utredning for et bærekraftig samfunn, University of Oslo.
- Jensen, C. (1998) *Jeg har sett verden begynne*, Forlaget Geelmuyden Kiese, Oslo.
- Lavik, R. (1997) *Miljøengasjement i endring*, Arbeidsrapport nr. 7-1997, Statens institutt for forbruksforskning, Oslo.
- Martinussen, W. (1999) *Sosiologiske forklaringer*, Fagbokforlaget, Bergen.
- McGuire, W.J. (1985) 'Attitudes and attitude change', in Lindzey, G. and Aronson, E. (Eds.): *Handbook of Social Psychology*, Vol. 2, Random House, New York.
- McGuire, W.J. (1986) 'The vicissitudes of attitudes and similar representational constructs in twentieth century psychology', *European Journal of Social Psychology*, Vol.16, pp.89–130.
- McGuire, W.J. (1989) 'The structure of individual attitudes and attitude systems', in Pratkanis, A.R., Breckler, S.J. and Greenwald, A.G. (Eds.): *Attitude Structure and Function*, Lawrence Erlbaum Associates, New Jersey.
- Østerberg, D. (1990) 'Det sosio-materielle handlingsfelt', in Sørensen, T.D. and Frønes, I. (Eds.): *Kulturanalyse*, Gyldendal, Oslo.
- Pieters, R. (1988) 'Attitude-behavior relationships', in Raaij, W.F.v., Veldhoven, G.M.v. and Wærneryd, K-E. (Eds.): *Handbook of Economic Psychology*, Kluwer Academic Publishers, Dordrecht, NL.
- Ronis, D.L., Yates, J.F., and Kirscht, J.P. (1989) 'Attitudes, decisions, and habits as determinants of repeated behavior', in Pratkanis, A.R., Breckler, S.J. and Greenwald, A.G. (Eds.): *Attitude Structure and Function*, Lawrence Erlbaum Associates, NJ.
- Sayer, A. (1992) *Method in Social Science: A Realist Approach*, 2nd ed., Routledge, London.
- Straume, I.S. (2002) 'Den avpolitiserende miljøpolitikken' *Samtiden*, nr.2.
- Thøgersen, J. (1999) 'Making ends meet: a synthesis of research on consumer behaviour and the environment', Working Paper 99-1, Aarhus School of Business.

Notes

- 1 'Toril' is not her real name, simply a name I chose to bring the figure better to life.
- 2 It is difficult to measure environmental awareness by, for example, using an index of attitudes based on selected questions. For this survey, a substantial number of households were selected from a Norwegian environmental network called The Norwegian Environmental Home Guard, whose members have undertaken to try to follow a green lifestyle and should therefore have a high level of environmental awareness. These households were compared with a random sample of Norwegian households.
- 3 'Food' is a rather more complicated category of consumption than I have been able to indicate here. What we eat is obviously not only an expression of the image we would like to project; we have a genuine need to eat. However, our starting point here is the mechanisms that affect whether or not we make 'green' choices – in this case, whether or not we make environmentally friendly choices when buying food (and I do not discuss which types of food are environmentally friendly). In this context, projecting an environmentally friendly image is important.
- 4 Another very interesting characteristic of these mechanisms is that they appear to be interlinked: each one influences the strength of the others (Holden, 2001). In our view, we need to learn more about this.
- 5 *Fremtiden i Våre Hender* (FIVH) is the most prominent environmental and consumer NGO in Norway, and focuses on the need for the affluent to reduce consumption in solidarity with the world's poor. It has around 30,000 members and has also expanded to a number of other countries in the form of the Future in Our Hands International Network. Its founder, Erik Dammann, previously worked in advertising and public relations.